

II. REMARKS

The final Office Action dated April 3, 2008, has been received and carefully noted. The amendments made herein and the following remarks are submitted as a full and complete response thereto.

Applicants thank Examiner Alstrum Acevado for the courtesy extended to Applicants' representative in the telephone interview of June 25, 2008.

Claims 1-3, 7, and 8 are pending, and by this Amendment, claims 10-16 are canceled. No other amendments to the claims or specification are made by this response.

Claims 1-3 and 7-8 were rejected under 35 U.S.C. § 103(a) over Bode et al. (DE 19606433, English abstract and translation) in view of Rhoades (U.S. Patent Publication No. 2001/0018061), Laughlin (U.S. Patent Publication No. 2002/0000237), Weber et al. (U.S. Patent Publication No. 2002/0058952) and/or Yu et al. (U.S. Patent No. 5,962,526). Applicants traverse the rejection.

Applicants submit that claim 1 of the presently claimed invention is directed to a "method of treatment of an area of skin of a human subject transepidermally, comprising the steps of: abrading a portion of the stratum corneum, followed by spraying a pressurized liquid at a pressure between 10 and 25 bar onto the area to be treated by means of a spray nozzle, and sucking the sprayed liquid by means of a conduit in communication with a vacuum pump" (emphasis added). Claims 2-3 and 7-8 depend from independent claim 1.

In contrast to the presently claimed invention, Applicants submit that Bode et al. merely discloses a device for "applying a treatment product... to the required skin area

via an application jet” (Bode et al., abstract). Applicants submit that Bode et al. does not teach or suggest the step of “spraying a pressurized liquid at a pressure between 10 and 25 bar onto the area to be treated” (claim 1). Rather, Applicants submit that Bode et al. actually discloses that the “pressure of the pressure medium can be adjusted between 0 and 8 bar” (Bode et al., abstract) (emphasis added).

Applicants submit that Rhoades, Laughlin, Weber et al. and Yu et al. do not cure the deficiencies of Bode et al. Applicants submit that Rhoades merely discloses a “composition... including a case and a plurality of abrasive particles” (Rhoades, paragraph [0012]). Applicants submit that Laughlin merely discloses “a system for automatically coating the human body,” which includes “apparatus which atomizes (also referred to as aerosolization, nebulization, mist generation, fog generation or spray generation” a chemical composition...” (Laughlin, paragraph [0057]). Applicants submit that Weber et al. is merely directed to “an apparatus for resurfacing or treating tissue (e.g., skin) using biocompatible materials that are blasted/propelled at the tissue with sufficient velocity to cause destruction, loosening, or unbinding of tissues to the desired depth upon impact” (Weber et al., paragraph [0034]). Applicants submit that Yu et al. merely discloses the “topical treatment of disease conditions” (Yu et al., col. 1, lines 24-25).

Applicants submit that none of the applied references (Bode et al., Rhoades, Laughlin, Weber et al. and Yu et al.) teach or suggest the step of “spraying a pressurized liquid at a pressure between 10 and 25 bar onto the area to be treated” (claim 1) (emphasis added).

Applicants respectfully disagree with the Examiner’s assertion that “it would have

been prima facie obvious to optimize the liquid pressure [of 0 to 8 bar disclosed in Bode et al.] to maximize subcutaneous drug delivery.” In support of Applicants’ argument, Applicants submit the enclosed Declaration under 37 C.F.R. § 1.132 of Alain Corre, one of the inventors of the present application. The Declaration discusses four references, which Applicants submit shows that it is instrumental to administer a liquid to the skin at a pressure within the claimed range of 10 to 25 bar. Applicants submit that administration of a pressurized liquid to the skin at a pressure of below 10 bars results in no significant penetration of the liquid, and administration at a pressure above 25 bars results in a strong risk of cutting the skin.

Applicants disagree that one of ordinary skill in the art would, without the benefit of hindsight, be motivated to increase the liquid pressure from the upper limit disclosed in Bode et al. (8 bar) three-fold to the upper limit of the presently claimed invention (24 bar), as none of the applied references provide any guidance or suggestion to spraying at the claimed pressure of between 10 and 25 bar. Further, as shown in the enclosed Declaration, Applicants submit that the administration of a pressurized liquid at a pressure of 10-25 bar conveys unexpected results.

For at least the above reasons, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 1-3 and 7-8 under 35 U.S.C. § 103(a) over Bode et al., in view of Rhoades, Laughlin, Weber et al., and/or Yu et al.

Claims 1-3 and 7-8 were rejected under 35 U.S.C. § 103(a) over Karasiuk (U.S. Patent No. 2003/0097139), Bode et al., Weber et al and/or Yu et al. Applicants traverse the rejection.

As discussed above, Applicants submit that claim 1 is directed to a “method of

treatment... comprising the steps of: abrading a portion of the stratum corneum, followed by spraying a pressurized liquid at a pressure between 10 and 25 bar onto the area to be treated by means of a spray nozzle, and sucking the sprayed liquid by means of a conduit in communication with a vacuum pump” (emphasis added). Claims 2-3 and 7-8 depend from independent claim 1.

In contrast to the presently claimed invention, Applicants submit that Karasiuk merely discloses a “device for exfoliating skin cells from an external surface of skin [which] includes a vacuum head base defining a chamber therein and having a substantially smooth treatment tip attached and extending from an end thereof or integral therewith” (Karasiuk, paragraph [0012]). Karasiuk merely discloses that “[f]luid may be applied to the skin through the opening in the treatment tip” (Karasiuk, paragraph [0021]). Applicants submit that Karasiuk does not teach or suggest a nozzle and a specific pressure of a sprayed liquid.” Karasiuk does not teach or suggest the step of “spraying a pressurized liquid at a pressure between 10 and 25 bar onto the area to be treated” (claim 1).

Applicant submit that Bode et al., Weber et al. and Yu et al. fail to cure the deficiencies of Karasiuk. As discussed above, Bode et al., Weber et al. and Yu et al. do not teach or suggest the step of “spraying a pressurized liquid at a pressure between 10 and 25 bar onto the area to be treated” (claim 1). As explained above and in the enclosed Declaration, Applicants submit that it is instrumental to administer a liquid to the skin at a pressure within the claimed range of 10 to 25 bar. Further, Applicants submit that the administration of a pressurized liquid at a pressure of 10-25 bar conveys unexpected results.

For at least the above reasons, Applicants request reconsideration and withdrawal of the rejection of claims 1-4 and 7-8 over Karasiuk, Bode et al., Weber et al., and/or Yu et al.

III. CONCLUSION

Applicants respectfully submit that this application is in condition for allowance and such action is earnestly solicited. If the Examiner believes that anything further is desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number listed below to schedule a personal or telephone interview to discuss any remaining issues.

In the event this response is not timely filed, the Applicants hereby petition for an appropriate extension of time. The fee for this extension, along with any other additional fees which may be required with respect to this response, may be charged to Deposit Account No. 01-2300, referencing Attorney Docket No. 021305-00201.

Respectfully submitted,

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Enclosure: Declaration